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ABSTRACT

The world economic situation is beset by growing worker dissatisfaction, slowing economic growth, and rising energy and resource costs. A partial solution to these problems may be worker participation in management and ownership. As production has become more dehumanized and workers have become increasingly dissatisfied and alienated, the quality of their work has suffered. To offset this malaise, various experiments have been conducted to improve the quality of work life and to give workers a voice in management decisionmaking. While workers in the U.S. often use unions to express their views, in other nations they hold seats on boards of directors and have formed work councils for this purpose. Ownership by workers may be either indirect in the form of investment funds and employee stock ownership programs or direct in the form of co-ops. It is difficult to generalize about the economy-wide impact of worker participation because of the lack of controlled experiments and long-term data. However, it appears that participation certainly does not harm productivity and probably improves it. Presently, worker participation is at different stages in countries around the world due to variations in cultural backgrounds and histories. (ELG)

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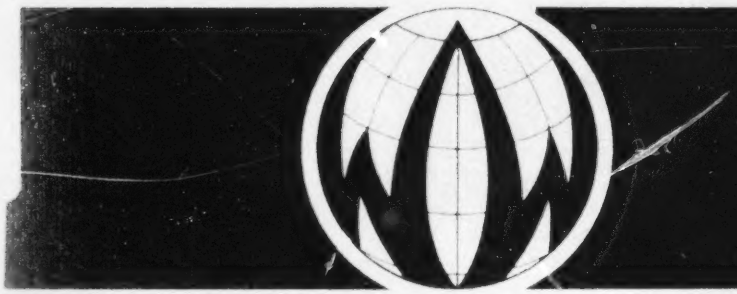
Worker Participation— Productivity and the Quality of Work Life

Bruce Stokes



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Worker participation in management and ownership can improve the quality of work life, raise flagging productivity, and help society cope with today's inflation and unemployment. In companies where workers assume new responsibilities, a previously untapped reserve of human resources can be mobilized. The increased motivation inherent in worker participation can improve economic performance, which may be vital to the future well-being of individual firms and the global economy.

The traditional tools of economic management stand impotent in the face of worker alienation and growing economic stress. An adversary relationship between labor and management only seems to aggravate this situation. Government planners and economic consultants appear stymied, unable to devise original solutions to these problems. New actors and new forms of management and ownership are needed.

These changes may no longer be a matter of choice. New technology, the rising costs of the factors of production, and expectations that work should be humane as well as profitable are forcing transformations in the workplace. As Michael Maccoby of the Harvard University Project on Technology, Work and Character points out: "The question is not whether to change work patterns; rather, the question is which kinds of change are going to be accomplished, how, and by whom." General Motors Vice-President George Morris has best answered that question: "Change in the work climate . . . cannot be mandated by management or by the union. . . . The people affected by the change must have a say in determining the nature of the change as well as planning how the change is to be effected."[1]

This is already happening in countless firms where workers are sharing in decision making on shop floors and in corporate boardrooms. On the fringes of the economy, worker-owners who salvage abandoned companies are preserving jobs and strengthening local

economies. In each case, participation means something slightly different. It can include collaboration to improve the physical and psychological work environment, the handling of routine personnel problems, joint consultation on production standards and goals, union representation on company boards, provision of workers' capital for enterprise investments, and worker ownership. Each situation encompasses efforts to broaden employees' involvement and control. A common thread that runs through successful efforts is a new sense of equality between the owners of capital and the owners of labor, who have a mutual interest in creating a more economically efficient and humane production process. An often unspoken, but equally important, element in many projects is the extension of democracy to the workplace, a trend toward greater participation in decision making that is taking place throughout modern society.

Due to different cultures and histories, however, worker participation is at different stages around the world. Rights that European works councils are just now achieving have long been the preserve of American union locals. Conversely, labor representation on corporate boards is sweeping Europe, but has yet to reach the United States. In Eastern Europe and the Soviet Union, workers are struggling to breathe life into participatory rights they have on paper; the Chinese are attempting to insure that participation does not facilitate politically motivated disruption of production. While the trend toward worker participation may be reversed, and while the experience with worker participation in one society may not be easily transferred to another, it seems clear that the ways of work are changing.

The Global Economic Malaise

Inflation and unemployment are today coupled in an unholy alliance. Since 1950, the average rate of price increase has been gradually accelerating in industrial countries. Millions are unemployed, with no immediate hope of work, and job claimants in developing countries will nearly double in the next 25 years.

"A simple rule of thumb is that a 1 percent growth in productivity brings inflation down by 1 percent."

Tnese twin problems are aggravated by a pervasive slowdown in the growth of manufacturing productivity. Increases in productivity are the result of technological innovations, capital investment, and improved organization of production, among other things. But productivity is usually measured by one criterion—output per hour of labor. From 1973 to 1977, manufacturing productivity in Canada, Italy, and Japan grew at only one-third the rate it had from 1960 to 1973. (See Table 1.) In the United States, an already slow growth rate of 3.0 percent per year slid to 2.2 percent. Productivity increases are also a problem in socialist countries. In the Soviet Union, the growth rate of agricultural and industrial productivity was nearly halved between the sixties and the early seventies. In Bulgaria and Rumania, industrial productivity grew slower in the seventies than in the late sixties; in Czechoslovakia and East Germany, productivity grew only insignificantly faster this decade than last decade. As Edward Denison, an economist with Brookings Institution, has observed: "Something important happened to productivity. I don't know what it is, but from the recent experience it is very bad."[2]

Table 1: Manufacturing Productivity Trends in Selected Countries, 1960-1977

Country	Annual Increase 1960-73	1973-77
	(percent)	
Canada	4.4	1.6
France	6.1	4.8
Italy	6.3	2.2
Japan	10.2	3.7
United Kingdom	4.0	0.1
United States	3.0	2.2
West Germany	5.5	5.6

Source: U.S. Bureau of Labor Statistics.

Rising labor productivity facilitates economic growth and helps limit inflation. A simple rule of thumb is that a 1 percent growth in productivity brings inflation down by 1 percent. The relationship be-

tween productivity and unemployment, however, is less direct and less well understood. Labor representatives fear that increased productivity will cause layoffs as management realizes it can get the same production out of fewer workers. In a static economy this could be true. But in a dynamic economy, industries with above average productivity increases tend to expand their employment, according to John Kendrick, former Chief Economist at the U.S. Department of Commerce.[3] And, to be sure, slow productivity growth creates an economic atmosphere that is not conducive to new investments and job creation.

Given the importance of productivity increases in the fight against inflation and unemployment, the recent trend in the industrial world is worrisome. Many partial and unsatisfactory explanations for the slowing of productivity growth have been tendered. Some experts believe lagging technological innovation and capital investment are the culprits. The influx of women and youth to the labor market in the seventies has possibly held back productivity growth. A widely noted study by Edward Denison suggests that flagging U.S. productivity is partially due to increased government health, safety, and environmental regulations.[4] Still others believe that the traditional hierarchical organization of management is incapable of stimulating further gains.

Whatever the cause, rapid rises in productivity may be a thing of the past. The combination of capital, technology, cheap labor, and abundant raw materials that produced the spurt in post-World War II productivity may turn out to have been an historical aberration. The last quarter of this century will see rising prices and possibly the scarcity of some of the major factors of production—energy, raw materials, and land. Traditionally, rising prices for one factor of production have created economic impasses eventually broken by the infusion of capital and technology. In the future, this alternative may not be as readily available.

Capital requirements to increase food and energy production and to raise the standard of living of the poorest one-quarter of humanity will be staggering. This competition for capital will make it more

difficult for enterprises to raise money for needed investments. Similarly, the technological optimism of recent years may prove to be shortsighted. Technological innovation in the past has generally been capital-intensive; future money shortages may mean some technologies will be just too expensive to develop. Furthermore, with the growing awareness of the social and environmental impact of technology, society may choose not to adopt some technologies in the future.[5]

Without easy recourse to massive infusions of capital and technology, other means of raising labor productivity need to be explored. Studies have shown that motivational factors account for great variations in economic performance. Labor-management cooperation on the shop floor, in the boardroom, and in the economy as a whole can provide some of this motivation. In the future, higher labor productivity must depend less on the availability of cheap money and technological innovation and more on people working together effectively.

A Better Place to Work

> Work is . . . about violence—to the spirit as well as to the body. It is about ulcers as well as accidents, about shouting matches as well as fistfights, about nervous breakdowns as well as kicking the dog around. It is, above all . . . , about daily humiliations.
>
> Studs Terkel, *Working*[6]

Workplace ennui affects all societies. Studs Terkel's sentiments echo through the Fiat assembly lines in Turin, the steel mills in the Ukraine, and the textile plants in South Korea. The benefits of an industrial society are often bought with the drudgery of millions trapped in mind-numbing tasks.

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Disenchantment with work life is, of course, nothing new. "Keeping St. Monday" (taking the day off) and drinking on the job plagued Josiah Wedgwood's china factories in the eighteenth century. The low quality of workmanship on assembly lines might be considered the modern equivalent of such alienation. The problem is reflected in the standard American joke that one should never buy a car built on a Monday or a Friday, when workers are particularly preoccupied.[7]

Worker dissatisfaction is widespread. In Australia, absenteeism averaged nine-and-one-half days per worker in 1977, a rate of 4 percent. In U.S. factories, full-time workers had an absentee rate of 4.2 percent over the last decade, a figure the Department of Labor believes could be cut in half. Moreover, absenteeism has not declined, despite recent high unemployment rates. Not showing up for work is in part a reflection of factory workers' low self-esteem. A University of Michigan Institute of Social Research survey of American workers in 1970/71 showed that only 24 percent of blue-collar workers would choose similar work again. Nothing could be more damning about a job.[8]

Worker malaise in Eastern Europe, the Soviet Union, and China is less well documented. A telltale sign of disaffection, however, is the growing concern expressed in speeches and newspaper articles about low-quality workmanship. "Enhancing the quality of our work has become the key problem for the development of our national economy," Soviet leader Leonid Brezhnev noted in a 1975 speech.[9]

The root of these problems is the rationalization of work, symbolized by the assembly line. Until recently the assembly line's human costs—the limiting of each worker's creative contribution to the final product—were disregarded because the material benefits of these production methods so far outweighed the productivity of the traditional craft organization of labor. In 1905, for example, craftsmen at Oldsmobile produced 5,000 automobiles. By 1914, Henry Ford's assembly lines were able to manufacture 100 times as many cars each year.[10]

Such productivity was enhanced by the work of Frederick Winslow Taylor, the father of time-and-motion studies, who broke down each task into its component parts and then designed the single most efficient way to do the whole job. Concern for the worker got lost in the shuffle. "In the past, the man has been first," wrote Taylor. "In the future, the system must be first." Taylor's fanatical devotion to the rationalization of production led him to glorify the dehumanizing nature of his theories. "All possible brain work should be removed from the shop . . . the time during which the man stops to think is part of the time that he is not productive."[11] Taylor's theories swept the industrial world. His writings were commended by both Henry Ford and Lenin. In the name of scientific management, industrial work was simplified to the point of tedium.

The psychological damage wrought by having one's human ingenuity and creativeness compacted into a 19-second work cycle, a task that must be repeated 1,500 times a day for weeks and years on end, is apparent. There are no learning opportunities or chances for individual decision making on the assembly line. Workers are generally lonely, physically or psychologically isolated from each other. Boredom leads to creative sabotage just to enliven the day. The assembly line worker must conform to the dictates of the machine; no longer is technology shaped by human needs. "I have to raise my hand to go to the bathroom, and then I can go only if there is someone to replace me," a worker observed bitterly. "Where else would an adult be treated this way?"

Alienation and work despair are not limited to the assembly line. Automated work, where employees stare at dials and gauges until their eyes begin to cross, has replaced much backbreaking industrial work. People with such jobs are often more highly trained than those on the assembly line, yet they miss some of the satisfaction of actually creating tangible products. A similar problem is faced by the growing number of white-collar workers in industrial societies. As the service sector of an economy grows, fewer people are involved in the actual production of goods. Filing papers in an office or taking orders in a fast-food restaurant, the kind of job that many people do today, is often soulless work. In fact, while many blue-collar

workers are experimenting with doing a variety of creative tasks, the white-collar worker seems to be moving toward a narrower range of functions.

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Governments have begun to see the need for change in the workplace. In the United States, four centers funded by the federal government, foundations, or private industry study the relationship between working conditions and economic performance. At least four states—Maryland, Massachusetts, Ohio, and Utah—have established quality-of-work-life centers. A productivity center has been set up by the Japanese Government. A cost-sharing program by the French Government underwrites up to 30 percent of the cost of job-enrichment programs in more than 60 French firms. In the 15 months up to the end of 1977, the government distributed more than $9 million for such projects. The German Government has sponsored even more extensive work humanization experiments. Beginning with a subsidy of $4.3 million in 1974, the government spent more than $29.4 million on such programs in 1977.[12]

Labor and management are also sponsoring experiments on the shop floor in the hope of creating a better place to work. In Sweden, the impact of absenteeism and high turnover rates on consumer spending, unemployment compensation, and social disintegration argued for rather drastic reforms of traditional factory work. In the late sixties, Volvo had a unique opportunity to tackle these problems when they built their new automobile assembly plant at Kalmar. The first thing that strikes the visitor to the plant is its shape. An irregular structure with many corners, it is made up of numerous small work areas and has the atmosphere of a small factory. Workers are divided up into work teams, each with its own entrance, dressing room, and coffee-break area. The building is well lighted, with many windows, and has a noise level comparable to that of a loud office.[13]

At Kalmar, the traditional assembly line has been abolished. Cars are assembled on individual platforms that move from one work area to another where teams of workers perform a series of tasks. Thanks to buffer zones between work teams, where auto bodies can be temporarily stocked, mechanics can vary the pace of their work and take

"A more democratic and cooperative working arrangement lets a company be more flexible and productive."

a break without upsetting the next team. Workers help each other and seldom do the same job in succession.

The results of the Kalmar experience have been encouraging. It does not require more time than usual to assemble a car at Kalmar. During the first half of 1976, absenteeism was one-fourth lower than at a conventional Volvo plant of the same size, and job turnover was one-fifth lower. Despite initial construction costs that were about 10 percent higher than for a normal plant, both labor and management representatives think the advantages of the new system offset the extra cost.

The most extensive quality-of-work-life project in the United States is at Harman International Industries' auto rearview mirror plant in Bolivar, Tennessee. In 1972, the United Auto Workers (UAW), Harman, and the Harvard University Project on Technology, Work and Character jointly designed a program to cope with employee dissatisfaction—dissatisfaction that became evident when more than half of the Harman workers responding to a preliminary poll said they thought their fellow workers sometimes worked badly, slowly, or incorrectly on purpose. Rather than focusing just on the alienation caused by some of the more onerous aspects of work life, the Bolivar experiment instituted a process of democratic decision making and evaluation among its 1,000 workers. In a network of shop-floor committees, employees make decisions about everything from painting walls to redesigning assembly lines.[14]

Harman's experience in Bolivar suggests that a more democratic and cooperative working arrangement lets a company be more flexible and productive and gives workers a more equitable and stimulating environment to live in eight hours a day. Caught up in the new participatory spirit in the plant, one group of women workers decided to sign their products. This assertion of their own craftsmanship reduced defects and saved the company more than $10,000 a year in previously wasted materials. Social life was affected both inside and outside the factory. The number of women and blacks in leadership roles in the union has increased since 1973 and the union has a black president for the first time. Employees can go home once they

have met established quotas, yet many stay on to attend organized classes in everything from guitar playing to advanced mechanics. To build a link to the community, workers opened their classes to the citizens of Bolivar and established a credit union and a child care center. Closer union-management cooperation has given the company an unusual advantage in a highly competitive market: bids for new contracts are now often worked out jointly.

Efforts to improve workplaces often encounter problems when power structures within an organization are altered. Human beings are asked to make fundamental changes in the way they relate to each other. Hierarchies flatten out, and decisions are made cooperatively. Despite some of the obvious advantages for the individuals and the firms involved, quality-of-work-life experiments often fail because the people involved feel threatened by the new relationships with their fellow workers.

Such was the case at the Rushton coal mine in Pennsylvania, where the owner and the United Mine Workers agreed in 1974 on a project to restructure mine work. In what they came to proudly call "Our way of working," miners on all three shifts in one section of the mine were set up as autonomous groups, trained to do every job. Grievances were handled through peer discipline. The whole work crew was responsible for the day-to-day production of coal, while foremen concentrated on insuring safety. In the past, management compared one shift's production with another's, hoping to spur output through competition, but the result was that workers left the mine-face a mess to thwart the next shift's production. Henceforth, output was measured on a 24-hour basis to encourage cooperative action. So that workers would see an immediate gain for putting forth additional effort, each miner in the experimental section received top pay.[15]

In January 1975, ten months after the project began, the experimental shaft mined 25 percent more coal than the least productive of the other two shafts, and had almost 40 percent lower operating costs. More important to the union, safety improved. During 1974, the other two shafts amassed 54 federal safety violations and had 25 accidents. The autonomous group was cited for seven violations and had only seven accidents.

Despite this impressive record, the Rushton experiment failed. In August 1975, the local union terminated the project in a close vote. The reasons were indicative of the personal tensions a quality-of-work-life experiment can produce. Middle management felt left out and antagonized the experimental miners by continuing to deal with them in an authoritarian manner. Workers in other parts of the mine, jealous of the prerogatives of the autonomous group, helped vote down the project. And, most significantly, the miners were merely plugged into a worker participation project dictated by top union officials and management. The miners had not asked for the Rushton experiment, so only those directly affected by it supported it.

By their very nature, efforts to improve the working environment lend themselves to management manipulation. While the initiatives may be couched in rhetoric about a new management style, workers and unions often fear the changes are really for the same old reason—trying to get more work from the same number of people for the same pay. Many labor leaders, especially in the US, feel work life experiments are only a management ruse to undermine and eventually replace unions. The number of nonunion companies that have humanization programs only helps confirm their fears. Unless worker representatives help design humanization experiments, a power struggle inevitably evolves over who shall control the program and how the benefits of the effort will be distributed.

Management and labor together must clarify the purpose of any attempt to improve the quality of work life. It is simplistic to say that management wants greater productivity and labor wants better working conditions. Sensitive managers know that a more humane workplace has its own intrinsic value. Yet they must work with a profit margin in mind. Conversely, employees ultimately benefit from increased productivity, if not through higher wages then through job preservation and a higher standard of living throughout the society. Yet workers want some immediate tangible returns for assuming new responsibilities, such as better pay and, for unionized workers, an assurance that cooperation with management will not lead to union busting. Resolving these institutional and human problems can only come through labor-management cooperation during the develop-

ment of a humanization program. Mutual interests must be defined and a forum for the resolution of differences and distrust must be established.

A difficulty in any effort to improve the quality of work life is the cruel illusion that a new organization of tasks will somehow make inherently boring jobs palatable. Neither the participatory restructuring of the assembly line nor the introduction of team work will necessarily make it a joy to go to work every morning. Some jobs are dirty and tedious, and the only way to make them better is to shorten working hours.

There are also rising expectations associated with any experiment in the workplace. Once people are given the opportunity to have a greater say in the organization of their work life, the only way their enthusiasm can be maintained is to continue to expand that control. But most proponents of job enrichment have no intention of creating workplace democracies. Their aim is to improve working conditions, not to establish new patterns of management and ownership.

These inherent limitations affect nearly all the quality-of-work-life experiments, even those that openly avow personal growth as their objective. Yet the expansion of the capabilities and interests of workers will ultimately be stifled without an open-ended process. Obviously, all experiments must have parameters. Experience has shown that it is best if these limits are jointly established by labor and management. But the sticking point for a whole host of workplace projects around the world is that there are few mechanisms for evaluating, redefining, and expanding the experiments once they have run their course. In the early seventies, both management and labor naively assumed that they could begin a process of worker participation and then neatly tie it off at a given point. Their failure to leave room for workers to increase their responsibilities as the programs developed led to frustration and eventual disenchantment in many cases.

Quality-of-work-life experiments can only go so far. They do not touch on broad economic issues that affect the worker and the prof-

"Neither the participatory restructuring of the assembly line nor the introduction of team work will necessarily make it a joy to go to work every morning."

itability of the firm. Without some link to management planning decisions, these worker participation efforts can be overwhelmed by events off the shop floor.

A Voice in Decisions

The principle of labor and management sitting down together to resolve issues of mutual concern is widely accepted. Collective bargaining about wages and hours has been an element of work life for at least a generation in most capitalist countries. During the seventies, however, workers have broadened their interests to include the workplace environment, the investment policies of their employer, and a whole range of social and economic issues. In response to a growing desire for broader participation in decision making in some countries, the scope of the collective bargaining process is expanding, works councils are giving workers greater say at the plant level, and employees are gaining entrance to corporate boardrooms as full-fledged voting members.

Strikes are an integral part of labor-management relations in capitalist countries. In fact, without the threat of a strike, contract negotiations often lack definition. However, strikes can be an economic bludgeon against both the company and the workers. Further, strike threats lack the flexibility often needed in discussions over health and safety or the quality of work life. In Sweden and Germany, where labor and management have created new participatory forums for solving their differences, the amount of time lost in strikes is negligible. (See Table 2.) In countries where traditional labor-management relationships still predominate, strikes are more common; between 1973 and 1976, the average Italian and Canadian laborer lost more than two days of work per year in industrial disputes.[16]

Worker participation is gradually being seen as an antidote to such industrial strife. In 1977, under pressure from the Swedish Trade Union Confederation, the Swedish Government established unions' right to a basic measure of influence in fields not covered by contracts. Unions are guaranteed negotiations on a whole range of management decisions, including personnel decisions and the appoint-

Table 2: Annual Time Lost in Industrial Disputes in Selected Countries, 1973-1976

Country	Days Per Worker
Australia	1.6
Canada	2.71
France	.55
Italy	2.03
Japan	.30
Sweden	.02
United Kingdom	.67
United States	1.10
West Germany	.04

Source: International Labour Office.

ment of foremen. Employers must initiate discussions with unions before they decide on important changes in the workplace—such as switching to a new line of business, reorganizing production methods, or selling the firm. Unions have the right to request negotiations on any other issue. To insure that such negotiations are not used merely to block owner's actions, the company is free to implement decisions once discussions with workers have been completed.[17]

Labor-management cooperation is also evident in the productivity committees in a number of American industries. In a limited number of U.S. plants, probably not more than 500 firms employing on the average less than 1,000 workers, a form of participation exists under the Scanlon Plan, named for its designer. This joint production effort relies on teamwork, a suggestion system, and a bonus arrangement to increase output and to mobilize the cooperative energies of the work force. As labor costs decrease or productivity increases, the savings are shared between the firm and the workers.[18]

Foreign competition and waning productivity inspired the United Steel Workers and the major American steel producers to provide in their 1971 contract for plant-level Employment Security and Productivity Committees. In some 250 American steel plants, union and

company personnel now sit down regularly to resolve production problems. While the ultimate decision on whether to implement a committee recommendation rests with management, reports indicate the work of the committees has improved product quality and equipment care and led to energy savings. Possibly of more importance, United Steel Workers President I. W. Abel cites the formation of these committees as part of the groundwork for the precedent-shattering Experimental Negotiations Agreement of 1973, when union and management agreed to binding arbitration of all outstanding contract disputes, which meant no strikes for the hard pressed steel industry.[19]

A study by the Bureau of Labor Statistics in 1973 indicated, however, that only 5 percent of the major contracts it surveyed contained provisions for joint productivity committees.[20] Even adding committees in small plants, Scanlon Plan groups, and other committees on noneconomic issues to the Bureau of Labor Statistics estimates, the conclusion is inescapable that most American businesses and unions still shy away from collaborative efforts.

This is not the case in Europe. Works councils have sprung up in almost every European country as forums for labor-management cooperation. Because many national unions do not have plant-level organizations, works councils often serve the same functions as the American union local. German works councils are probably the most powerful of these institutions. They exist in all plants and offices with more than five workers. Their duties include negotiating with management over work hours, health and safety issues, plant closings, and layoffs. Ted Mills of the American Center for the Quality of Work Life points out that Americans consider German worker representation on boards of directors radical, but that Germans recognize that works councils give far more real power to employees by providing a better opportunity to integrate their views into company plans. While works councils in most other European countries have an increasingly strong voice, in France the *comites d'entreprise*, as they are called, are largely ineffectual because neither unions nor management supports them. A legacy of postwar legislation, they are an example of the problems of imposing participation on unwilling participants.[21]

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In Japan, consultative committees exist in over two-thirds of the larger enterprises. Joint decision making is only required on health and safety questions but other issues such as large-scale layoffs, transfers, and discipline are first discussed in the committees, with collective bargaining available as a fallback. Paralleling these consultative committees are about 600,000 quality-control groups comprised of workers and foremen. The Japan Productivity Center reports that in many manufacturing operations these groups have drastically reduced defects and eliminated the need for inspection crews.[22]

Worker participation is a fundamental tenet, if not a reality, in Eastern Europe. The Soviet Constitution states that worker-collectives "shall take part in discussing and deciding matters pertaining to the management of enterprises and . . . the improvement of working and living conditions. . . ."[23] In practice this has meant indirect participation controlled from the top by the trade unions and the Communist Party, but no direct participation. The short-lived works councils in Hungary in 1956 and in Czechoslovakia in 1968, the reported appearance of workers' grievance committees in Poland, and alternative unions in Russia all suggest that many Eastern European workers would like a greater voice in the running of their factories.

In Yugoslavia, they have that voice. Each factory, store, and office has a workers' council. Its wide-ranging powers include the right to select the management board, do economic planning, set wages, and handle disciplinary problems.[24] A common criticism of self-management is that if everyone has to decide on everything, nothing will get done. The Yugoslav experience, however, indicates that workers actively participate in decisions on issues of personal relevance, such as wages and working conditions, and leave to managers the decisions on the firm's relationship with the outside world. This makes common sense. Not all workers have the time or the inclination to involve themselves in all the administrative and financial problems of a modern industrial firm. A democracy is not judged by the degree of participation but by the potential for people to have an impact on decisions that directly affect them. Under this criterion, the Yugoslav system gets high grades.

"A democracy is not judged by the degree of participation but by the potential for people to have an impact on decisions that directly affect them."

Until recently, workers in China had even greater control over decision making. During the sixties and early seventies, revolutionary committees of workers who oversaw production broke down bureaucratic privilege and the technical division of labor, democratized incentive schemes, reduced pay differentials, and generally promoted worker involvement in enterprise management. In addition, the Chinese turned the Western idea of participation in management on its head by requiring bureaucrats and technicians to spend a certain amount of time doing physical labor to "learn from the workers." Two-way participation was undoubtedly some incentive to the Chinese worker, who compiled an enviable production record. With the exception of iron, steel, and coal, industrial output grew at the remarkably smooth rate of 10 percent per year between 1966 and 1975.[25]

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In the mid-seventies, however, the factional struggle between radicals and pragmatists that was going on within Chinese society was brought into the factories by the revolutionary committees. The feuding after Mao's death affected planning, management, and labor discipline. Production plummetted. With the pragmatists apparently in firm control in 1978, the winds of industrial policy have shifted. Jan Prybyla, an observer of the Chinese economy from Pennsylvania State University, reports there is renewed emphasis on discipline and strict personal responsibility. The revolutionary committees have been abolished. Worker participation is now channeled through trade unions. Management hierarchies and technical experts have been reinstituted. Incentives to increase output and improve product quality have shifted from peer pressure to individual material rewards: pay hikes, a wider wage scale, and bonuses.[26]

But worker participation in China is not dead. Local level decision making is still an important aspect of Chinese life. In October 1978, Vice-Premier Teng Hsiao-ping called for continued worker involvement in management in a speech to the first congress of China's trade unions in 21 years. Recent official study tours of factories in Yugoslavia suggest that the Chinese may be considering a more structured worker participation program, possibly through the trade unions, similar to those being experimented with in the West.[27]

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In Western industrial countries, most major decisions on the future of firms and, thus, on workers' livelihoods are not taken on the shop floor and are generally not brought up during collective bargaining. In the hope of participating in these decisions, workers have sought representation on company boards of directors.

The West Germans have pioneered in this respect. Their system of codetermination, called *Mitbestimmung*, began in 1951 in the coal and steel industries and was expanded in 1978; labor and stockholders now have an equal number of seats on the supervisory boards of all major German corporations, including the subsidiaries of such American giants as Ford, IBM, and Proctor and Gamble. According to a study reported in *Die Zeit*, codetermination now involves nearly 700 firms and more than 5.6 million workers.[28]

All German firms have two separate boards, a supervisory one that sets company policies and a management one that handles day-to-day affairs. Each group of workers—blue-collar, white-collar, and middle management—is represented on the supervisory board; the chairperson is selected by management and always casts the tie-breaking vote. While this setup would suggest that labor will always be in the minority, experience has shown that most board decisions are by consensus.

Most of the fears of German management about sharing responsibility and authority with labor have proved groundless. A 1970 government commission concluded that there had been neither a sacrifice of earnings or investment due to *Mitbestimmung* nor abuses of confidentiality by labor's board representatives. Moreover, observers indicate unions do not use their new position to obstruct decision making.[29]

Mitbestimmung was given its greatest test during the economic downturn of the mid-seventies. At Volkswagen, management wanted to cut back the labor force and shift one-third of production to the United States. Despite evidence from its own economists that car sales would soon improve, the union reluctantly agreed to the eventual dismissal of 25,000 workers, which could have ultimately cost

the company as much as $100 million in severance payments. When demand for cars soon picked up and the company was forced to rehire all the laid-off workers, vindicating the union's original advice, labor representatives on the board gained new stature. The decision to build Volkswagen Rabbits in the US was handled with equal cooperation. The union wrested from management some concessions on investments to maintain Volkswagen employment in Germany and then bowed to the realities of the market, which dictated shifting production abroad. It is hard to believe that such difficult adjustments would have been made peacefully without the full participation of labor representatives on the supervisory board.[30]

The concept of codetermination has caught the European popular imagination. By law, the boards of directors of companies in Scandinavian countries must include workers. In France, workers send two representatives to meetings of corporate governing boards, although they may not cast votes. In the Netherlands, a unique system of codetermination has evolved: corporate boards renew themselves from a list of candidates jointly approved by labor and management, thus not insuring labor representation but giving unions some veto power over the composition of the board. The European Community has taken a cue from its member governments and will soon require any company wishing to incorporate as a European rather than a national organization to place workers on its board. Only in Switzerland, Belgium, and Italy does there seem to be no major interest in codetermination.[31]

With the British penchant for making big changes in small steps, the United Kingdom is moving towards including workers on boards. After an independent commission chaired by Oxford historian Alan Bullock strongly endorsed the concept, the Labour Government issued a White Paper in 1978 that fell short of the commission's recommendations but that made it clear that industrial democracy in Britain was no longer a question of "if" but of "when and how." The management of all British and foreign-owned firms with more than 500 employees will be required to discuss with workers any major proposals affecting investment plans, mergers, take-overs, expansion or contraction of the market, and organizational changes.

Three to four years after this system is in operation, workers in each company can decide by majority vote if they want to assume one-third of the seats on the board of directors.[32]

Across the Atlantic, formal worker representation on boards of directors is still anathema to most labor leaders. According to AFL-CIO official Thomas Donahue, "We do not seek to be a partner in management, to be most likely the junior partner in success and the senior partner in failure."[33] Most union leaders see worker participation as a ruse to nullify the historically successful adversary role of American labor. They feel that any blurring of the distinction between labor and management will undermine their negotiating position, weaken workers' confidence in their union, and decrease membership.

But workers in the boardroom would not necessarily make American unions obsolete. As Paul Blumberg of the City University of New York points out, the function of the union is to protect the worker as an employee. The role of worker representatives, be they union or nonunion, on any worker-management committee is to protect the worker as a producer. There is an apparent, though not a real, conflict of interest in workers on company boards of directors helping approve a wage settlement, for example. The worker or union representatives in such a case are not negotiating with themselves, as some critics suggest, but are merely fulfilling the multiple roles that any citizen of a democracy may be called upon to carry out.[34]

For management's part, there is considerable sentiment that labor representation on boards would be devisive and inefficient. However, the influential Trilateral Commission, which includes many representatives of the American business establishment, suggested in May 1978 that the reservations union and business leaders have about employee representation on boards of directors could largely be overcome by adopting the two-tiered boards used in Germany. "This would enable the unions to be in a position to have access to a far greater degree of information than at present, to play a part in the appointment of the managing board and to influence long-range planning, without coming into conflict with the union's collective

"The role of worker representatives, be they union or nonunion, on any worker-management committee is to protect the worker as a producer."

bargaining role in which it would deal solely with the board of management."[35] While board participation is a long way off in the United States, the successful European experience may soon encourage progressive American companies to experiment.

Several Third World governments are also slowly moving towards formal labor cooperation with management. Pakistan requires a worker representative on the management board of all firms employing more than 50 people. Venezuela has codetermination in nationalized industries, as does Bolivia in its state-owned tin mines. Tanzania has workers on company supervisory boards as well as workers' consultative committees. India has had such labor management committees since 1947, although reports indicate they have been largely ineffectual.[36]

Labor-management cooperation on the shop floor or in the boardroom does not, however, address the issue of who benefits, or who should benefit, from the firm's economic success. In any economic system power rests with those who control the fruits of production—shareholders, the state, or employees. That worker ownership is the next step after management participation is not self-evident. To be sure, as French philosopher Andre Gorz points out, worker participation is a reform that can lead to fundamental changes in society.[37] But while many of the same economic forces that lead to worker involvement in management also encourage worker involvement in ownership, the latter would entail a fundamental transition for society. For this reason, it may take decades for any trend toward worker-ownership to become apparent.

A Stake in the Business

Ownership of the means of production has been a rallying cry for workers since Robert Owen's experiments in early nineteenth-century Britain. Karl Marx went one step further by calling for ownership by the state in the name of the workers. State ownership has since lost

its lustre as government bureaucrats have proved no more responsive to the needs of workers than private owners were. But there has recently been a new wave of interest in worker ownership, either indirectly through the ownership of stock or directly in individual companies.

When most people envision worker participation in ownership, they think of collectively run, politically motivated food co-ops or small, alternative businesses. Few realize that workers own a piece of some of the world's better-known enterprises. Sears Roebuck, with 400,000 employees the largest retail department store company in the world, is 20 percent worker-owned through a profit-sharing plan. *Le Monde*, one of the best newspapers in the world, is 60 percent owned by reporters and staff. And the popular Triumph Bonneville motorcycle is built by British worker-owners.[38]

The University of Michigan's Institute for Social Research estimates there are more than 1,000 firms in the United States with some small amount of employee ownership (usually by managers), not including profit sharing and pension trusts. Cooperatives, the popularity of which seems to go through cycles linked to economic conditions, are again on the upswing. In 1978, the U.S. Congress passed a bill creating a cooperative bank that, as part of its program, can lend up to $10 million a year to production co-ops, giving them a stable source of national funding for the first time. In other countries, the cooperative is already a potent economic force. Co-ops now account for nearly 3 percent of the Italian gross national product and employ more than 170,000 workers. In France, there are some 500 worker-owned industries, the largest of which employs more than 4,000 people and produces about one-third of the country's telephone equipment. In Israel, self-managed kibbutz industries produced 5.7 percent of the country's industrial output in 1974 and employed 8 percent of the industrial work force.[39]

The most rapidly growing form of worker ownership in the United States is the Employee Stock Ownership Program (ESOP). The Employee Stock Ownership Council estimates there are now 3,000

"There are more than 1,000 firms in the United States with some small amount of employee ownership."

ESOPs in the country. To establish an ESOP, a firm sets up a trust that borrows money from a bank, which it then uses to buy a block of company stock. Over time, the shares that the trust holds are allocated to company employees in proportion to their pay. Workers can only sell their stock when they quit or retire. ESOPs give workers a chance to slowly assume ownership of their companies, and give management a new source of cheap capital through built-in tax incentives. The idea has proved so attractive that the state of Alaska is considering a General Stock Ownership Plan to provide capital to private businesses in return for stock to be held in the name of all Alaskans.[40]

While there are still relatively few ESOPs, another form of U.S. worker ownership—pension funds—has been gradually expanding since World War II. Private and public pension funds were worth more than $500 billion in 1978, owned between 20 and 25 percent of the equity in American corporations listed on the New York Stock Exchange, and held nearly 40 percent of corporate bonds. Pension funds represent one of America's largest sources of investment capital, being four times the amount of all individual savings.[41]

As capital becomes more expensive, companies can be expected to turn with greater frequency to their employees for the vast sums of money needed for production, for improvements in the quality of work life, and for pollution-control investments. However, this will not necessarily increase workers' participation in decision making. Most ESOPs consist of nonvoting stock and most pension funds are controlled by management or investment counselors, not workers. In most cases, the law limits the amount of stock that pension funds can buy in a single company. However, the potential for employees to assume direct ownership is inherent in ESOPs and pension funds. It may only be a matter of time before workers begin to want some of the control implicit in the use of their money. British unions are already demanding codetermination over the investment of the $40 billion in pension funds there.[42]

While others sort out who controls the growing amount of workers' capital, the Swedes are embroiled in a protracted public debate over a

proposal to create employee-controlled investment funds that would annually receive stock that is equal to some portion of each firm's
28 profits. The monies would not actually leave the businesses but would be retained for investment, and the funds would, over 20 years or so, acquire half-ownership of the companies. Individual workers would have no claim to the stocks, which would largely be controlled by the unions. Economist Rudolf Meidner, formulator of the proposal, argues that employee investment funds would in part counteract the concentration of wealth in Swedish society, allow workers to achieve codetermination, and insure the availability of investment capital. Opponents charge that Meidner's plan would create another large, nonparticipatory economic power center, as out of touch with the needs of workers and society as current forms of ownership are. The support of the Social Democratic Party for this proposal may have contributed to that party's defeat in the 1976 national elections.[43]

Future high demand for capital makes employee investment funds appealing. As early as 1972, German unions and the Social Democratic Party entertained proposals to create such funds. In the Netherlands in the mid-seventies, a government coalition of social democrats and liberals was very close to an agreement on a compulsory scheme for employee funds, financed from profits, when a nonsocialist government took over. Profit-sharing plans have been discussed in Denmark for nearly ten years and in 1973 the government proposed a compulsory wage-earners investment fund financed by payroll taxes.[44]

While ESOPs and investment funds represent a growing potential for indirect worker ownership of the economy, most ownership to date has involved individual firms. Among the oldest and most successful American worker-owned enterprises are some plywood manufacturing plants in the Pacific Northwest. There have been about 30 plywood co-ops formed since the twenties, half of which still exist. Most were born out of necessity, when workers faced unemployment lines if they did not buy their factories from their bankrupt employers. These companies, ranging in size from 80 to 450 workers, made up about one-eighth of the Douglas Fir plywood industry in 1974.[45]

Most plywood co-op workers own a share in their company, which permits them to vote on major business decisions and to select a co-op board that hires plant management. There is generally an egalitarian pay scale, about 25 percent higher than traditionally owned mills. Plywood workers also receive a year-end division of profits, often amounting to several thousand dollars, and have equity through their co-op shares, which have recently sold for between $20,000 and $200,000.

Despite such a rosy picture, the worker-owned plywood co-ops have their problems. Few new ones have been formed since the fifties. Share prices are so high and members are so reluctant to leave that plants are hiring more nonshareholding workers, creating a situation of first- and second-class laborers unbecoming to a cooperative. Plywood worker-owners do not seem to be risk takers: expansion is virtually nil in most mills. Management is an ongoing problem. As Daniel Zwerdling points out in *Democracy at Work*, workers feel a constant tension between exercising their oversight responsibility and delegating enough authority to managers to allow them to make creative and effective decisions.

In Europe, worker ownership has also been the response to economic adversity. At the Triumph motorcycle plant in Meriden, England, 1,750 workers faced losing their jobs in 1973, when management decided to close up shop because of sales competition from Japanese bikes. Convinced that their product was still salable, the Meriden workers first occupied the plant and then got a government loan of $10.3 million, which allowed them to keep at least 700 employees on the payroll.[46] After an initial rocky start, the company seems to be keeping its head above water.

European interest in worker ownership draws its inspiration from the complex of 64 highly successful industrial cooperatives located in Mondragon, Spain. The Mondragon co-ops were started in the mid-fifties to help rejuvenate the Basque region and to keep young people from moving away. They employ, and are owned by, 15,500 workers, and they are Spain's largest producers of refrigerators and stoves.

Their combined sales in 1976 totaled $336 million, 20 percent of which was in the international marketplace. The complex includes eight housing co-ops, five agricultural co-ops, and a consumer co-op. Fully aware of their need for well-educated workers, the co-ops have their own technical school that is training student-workers. A cooperative bank, with 70 branches, mobilizes local savings and holds part of each co-op's profits in trust for individual employees. This money is loaned out to start new cooperative ventures and to underwrite capital improvements. The Mondragon co-ops thrive, in large part, because they have succeeded in creating their own economy, which protects young companies in a hostile entrepreneurial environment.[47]

Worker participation in industrial ownership has been slow to spread to the Third World. When Asian, African, and Latin American countries have rejected traditional forms of private ownership, they have generally opted for state ownership. As in much of Eastern Europe, worker participation in such cases has been more rhetorical than real. Industrial co-ops have generally been small, often linked to the agricultural economy. During the seventies, however, large-scale experiments in worker ownership in Peru and Chile have provided a glimpse of the problems and prospects facing worker participation in developing nations.

In 1970, the Peruvian government called for a pluralistic, fundamentally self-managed economy—neither communist nor capitalist. The industrial economy would include a reformed private sector, with workers gradually assuming control, and a social property sector, consisting largely of new enterprises that would be worker-owned and -managed. At its peak, the reformed private sector included more than 2,000 firms employing more than 200,000 people. A portion of the profits was set aside so that these employees, as a group, would slowly acquire ownership of half of each firm and an equal voice in all management decisions. Firms in the social property sector, on the other hand, were from the beginning held in trust in the name of all workers in that economic sector. Some portion of their profits went to a common fund that was used to expand the number of firms, which eventually totalled 66 companies with 7,000 employees.[48]

Initially hailed as a model for worker participation in the developing world, the Peruvian experiment has failed. In the mid-seventies, the bottom fell out of the Peruvian economy as copper prices fell, as new oil fields were unproductive, and as the anchovy catch declined precipitously. Ideology and an authoritarian mind-set replaced good management in both individual firms and in the economy at large. By 1978, the government reversed its policy. Each worker in the reformed private sector was given stock that could be traded on the open market, setting the stage for entrepreneurs to reaccumulate all the shares. Expansion of the social property sector was halted, leaving many firms on the edge of bankruptcy. Worker participation in the industrial sector was limited to about 80 self-managed firms with 12,000 employees who were desperately trying to buy their bankrupt companies in order to keep their jobs.

What happened to worker participation in Peru? The state of the economy clearly worked against reform. Despite the fact that it would have taken one to two generations for workers to attain half-ownership in most firms, the government thought domestic and foreign private investment was being scared off. Furthermore, although new ownership structures were created, life on the assembly line continued to be monotonous, dehumanizing, and alienating. Participation in management was limited to an occasional vote. The average worker saw little financial gain from the reforms. Peter Knight of the World Bank estimates that barely 13 percent of the economically active Peruvian population were touched by either agrarian or industrial reforms, hardly enough to secure this radical initiative against the batterings of economic misfortune and political opposition.[49]

While Peru was making a conscious effort to increase worker participation in ownership, in Chile many workers gained control of their firms by default. When General Augusto Pinochet took power in late 1973, he championed an economic policy of free market competition and attempted to sell off state-owned enterprises, which by that time accounted for over 40 percent of industrial production. With the economy in a state of chaos rivaling that of the Great Depression, a company's workers were often the only interested buyers. More than

5,000 workers in some 50 firms took over management and ownership responsibilities in order to preserve their jobs. Today their efforts dot the industrial landscape: the largest toothpaste container manufacturer in Chile is worker-owned, as is one of the country's two wallpaper manufacturers. More significantly, the largest woolen textile manufacturer is run by its 1,400 workers. With no support from the Chilean government, but with substantial injections of overseas aid, the firms are holding on and four or five new worker-owned companies are being formed each year. But their prospects are limited without greater access to capital and an upturn in the economy.[50]

The contrast between the failure of the Peruvian effort to impose worker ownership through government fiat and the limited success of the Chilean workers who took control out of necessity typifies the state of worker ownership in the world today. In most instances where workers have successfully become small capitalists, they have done so to protect their livelihoods. They have spun off new worker-owned enterprises to expand employment in their regions and to solidify their own gains. Despite all good intentions, conveying ownership to workers who are uninterested in receiving it seems to doom the effort to failure. Moreover, where ownership has not included greater participation in management and an improvement in the quality of work life, problems have arisen.

It would be misleading to say there is a global trend toward worker ownership. There are isolated success stories, and there is some indication that a worsening world economy would trigger conversions to worker ownership. But there seems to be no great demand by workers or governments to shift control of the industries that are economically sound. For the time being, worker participation in ownership is likely to be confined to companies struggling at the margins of the economy. In many cases, however, conversion to worker ownership of a particularly weak firm would be a cruel delusion, only forestalling the company's inevitable demise. For some time to come, the limited number of worker-owned firms will serve as laboratories where employees assume new responsibilities and test new forms of decision making.

"In most instances where workers have successfully become small capitalists, they have done so to protect their livelihoods."

Participation and Productivity

The impact of worker participation on productivity and economic performance is the subject of contentious debate. Although the data are not conclusive, ample experience exists to quell most fears that employee involvement in day-to-day company decisions leads to declining economic efficiency. A 1975 National Science Foundation survey of 57 field studies of worker participation experiences in the United States found that four out of five reported productivity increases. A 1977 study by Dr. Raymond Katzell of New York University of 103 U.S. worker productivity experiments confirmed these findings. Karl Frieden, in a 1978 study for the National Center for Economic Alternatives, concluded that, "the scientific rigor of many of the studies on workers' participation is less than ideal. However, a clear pattern emerges . . . supporting the proposition that increases in workers' participation result in improvements in productivity."[51]

The Trilateral Commission's Task Force on Industrial Relations was less enthusiastic on the question, arguing that "there is not very strong evidence that these new methods of organizing work have been conspicuously more successful than the more orthodox authoritarian style of management in achieving industrial efficiency measured in terms of output."[52] Nevertheless, nothing in the literature suggests that participation significantly harms productivity.

One of the problems with measuring productivity gains in worker-managed or -owned factories is that few of them have existed long enough for short-term statistical fluctuations to iron themselves out. Fortunately, the co-op plywood mills in the American Pacific Northwest have been in operation long enough to provide such information. Katrina Berman of the University of Idaho reports that co-op wages are as much as 30 percent higher than those paid other plywood workers. Yet the Internal Revenue Service does not consider these wages to be capital gains because it is convinced worker productivity is at least that much higher. From a production standpoint, Paul Bernstein of the University of California at Irvine has found that output per hour of work is 26 to 43 percent higher in

worker-owned plywood firms than in conventionally-owned mills. Similarly, high productivity in the Mondragon cooperatives has permitted them to expand their operations. And Jaroslav Vanek of Cornell University believes that the economic benefits inherent in self-management and social ownership help account for the strong record of the Yugoslav economy.[53]

More recent conversions to worker ownership show equally encouraging economic benefits. At Tembec Forest Products, Inc., in Canada, productivity rose 30 to 40 percent in the first three years after workers bought a share of the business. The Chicago and Northwestern Transportation Company, a large midwestern railroad, was bought out by its employees in 1972. Although the company had been in the red for some time, it earned profits in five of the next six years. Similarly, worker-owners at Meriden found that the number of motorcycles they were able to produce annually per employee increased from 14 to 22 after they formed a co-op. The same has held true in developing countries. In his study of Peru's short-lived worker-ownership experiment, Peter Knight found that productivity was considerably higher in the reformed private sector than in privately controlled firms. Juan Espinosa and Andrew Zimbalist in their book, *Economic Democracy*, noted similar high productivity in Chile's worker-owned and -managed industries.[54]

The positive correlation between participation, productivity, and economic performance was confirmed in the study of employee ownership by the University of Michigan's Institute of Social Research. The 30 employee-owned firms in their survey had higher profits than did conventionally owned firms in the same industries. Further, they found that while minor participation in ownership may not necessarily be associated with higher productivity, in general the more equity owned by workers, the greater the profitability of the company.[55]

An added benefit of worker ownership is a commitment to maintain employment. Worker-owned factories are often labor-intensive, a plus in an era of high unemployment. The productivity increases

"Employees are uniquely qualified to help design and implement a resource-conserving production process."

that occur in such enterprises are all the more impressive because they are achieved without laying off workers.

Workplace changes that do not involve ownership also generate impressive results. In a new General Foods pet-food plant in Topeka, Kansas, in 1971, the workers were organized into autonomous work teams, each group in charge of one complete production process. Productivity was between 10 and 40 percent higher than in conventionally organized plants. Absenteeism fell, as did waste. Lower unit costs saved the company $1 million a year. The factory operated for almost four years without a single lost-time accident. Another consequence, of mixed economic implications, was that higher productivity meant only 70 workers were needed to produce a level of output that management had expected would require 110 employees.[56]

In a world increasingly concerned with the most efficient use of scarce resources, potential energy and materials savings are an additional economic benefit of participation programs. The logical place to begin making such savings is at the shop-floor level. There, employees are uniquely qualified to help design and implement a resource-conserving production process. To illustrate the energy conservation potential, Karl Frieden quotes a plant official at the Campbell Steel Works in Youngstown, Ohio: "A couple of years ago we were having problems with excessive energy use at the open-hearth furnaces. We got the furnace heater workers together in informal groups and discussed the problems. Within one week, fuel consumption was reduced 20 percent."[57] Reports of worker participation experiments do not, however, generally focus on conservation results, so it is difficult to assess the long-term impact on resource use of such programs. Scattered findings and intuition suggest the savings could be substantial.

As the demand for capital resources increases, firms that can cooperate with their employees to raise money internally will be at a competitive advantage. Historically, the strongest firms have been those that do not rely on capital markets but that raise investment capital through self-financing. Pension funds are one internal source of funds, as long as workers are protected so that all their eggs—their

wages and their retirement—are not in one basket. In return for giving employees some ownership and control, governments have allowed companies certain tax advantages. In some cases, workers have foregone wage increases and invested their own savings to raise capital. These are largely untapped sources of future investment funds. Their availability will be determined in part by the willingness of the current owners of companies to share their control. If they will, and if workers begin to realize a tangible benefit from ownership, inflationary wage demands are more likely to be curbed, generating more profit for reinvestment.

Generalizations about the economy-wide impact of worker participation are difficult given the lack of controlled experiments and of long-term data. It is impossible to separate the impact of participatory organizational changes from that of other ongoing changes in society. In general, though, the hopes of advocates and the fears of opponents of participation appear to be exaggerated.

Worker participation, especially in ownership, can help profitability, often enabling companies to stay afloat that otherwise would die. Participation reduces employee-related drags on economic performance: absenteeism, poor workmanship, high turnover, strikes, and so forth. In addition, there seems to be a considerable initial jump in productivity associated with the introduction of substantive worker participation programs. Whether, over time, productivity continues to rise faster than in conventional firms remains to be seen. Certainly short-term improvements may prove fleeting if workers do not receive some direct economic gain from participatory work changes. The U.S. Department of Health, Education, and Welfare's *Work in America* warns that "the redesign of work tasks through participation will increase productivity, but some experience has indicated that without profit sharing workers may feel that they have been manipulated and productivity may slip back to former levels."[58] More broadly speaking, there will be no economic benefits from worker participation if workplace democracy is a sham. If employees are going to participate, then power and the fruits of economic success must be democratically apportioned.

Conclusion

There is an untapped reserve of human energies, resources, and commitment in industrial economies. The management and ownership of the means of production that has evolved from the entrepreneurs of the nineteenth century to the conglomerate bureaucracies of today is unable to take full advantage of this potential. Little room is left for participation by the workers who are most affected by economic and workplace problems. Authoritarian management has been able to generate a surplus in an economic system characterized by abundance. Now, however, it is faced with growing worker disaffection, slowing economic growth, and rising energy and resource costs.

Participatory management may be the answer to some of these problems. When employees have some control over the production process and receive some of the added fruits of their labor, they are happier and more productive. With new responsibilities as managers and owners, the relationship between energy conservation in the firm and the energy problem facing society, for example, becomes clear. Such insights and a new stake in the economic success of the company encourage workers to change personal and corporate attitudes and behavior.

But if worker participation is so beneficial, why is it only now being considered as a viable way to organize economic enterprises? First, social conditions in some countries seem ripe for such initiatives. In Western democracies, there is growing interest in participatory democracy, as evidenced by the consumer, environmental, and women's movements and by the agitation for the reform of political parties. The philosophical and practical concerns behind reviving neighborhoods and initiating local responses to problems have spilled over into the workplace. In Eastern Europe, the struggle for human rights has found expression in worker participation at the factory level. Some countries in the developing world are experimenting with worker participation as part of alternative industrialization strategies. In many nations, concern about employee alienation has sparked participatory efforts to improve working conditions.

Second, resource scarcities, environmental problems, and an increasing awareness that humanity must build a sustainable society are forcing countries to rethink how best to manage their economies. Historically, cooperatives and populist movements have arisen in times of crisis only to pass with the rebounding of the economic cycle. There is growing evidence, however, that the global economy may be facing a fundamental discontinuity, rupturing the economic cycles of the past. If so, then a new type of management will be needed, one capable of dealing with slow growth, rapid inflation, and high unemployment. Experience with worker participation around the world suggests that broadening the responsibility for decision making and problem solving will be essential in the future for successful economic management at the company level and in the economy at large.

Participatory management requires a new set of values. Managers in socialist and capitalist enterprises alike have been taught to value product over process, speed over deliberateness, and decisiveness over consensus. The values that a group brings to a decision making situation have been counted as a cost and those brought to the process by an individual as a benefit. In the future, management that fails to capitalize on the strength of groups will be at a distinct competitive disadvantage. Since participatory organizational forms cannot change human nature, however, leaders must learn to deal sensitively with most people's tendency to remain uninvolved. Successful managers of the future will be enterprising, nonauthoritarian leaders who can mobilize human skills, not just technical know-how, to solve problems. Umberto Agnelli, managing director of Italy's giant Fiat company, believes that "management must be refined, through careful planning, with the full involvement and participation of all segments of society, including unions. There *must* be a new decentralizing process of consultation and decision making."[59]

More worker participation will also mean a new role for unions. Unions are political institutions whose power is now largely defined by the number of people they represent. Technology is rapidly undermining these numbers in many of labor's traditional strongholds: coal, railroads, and the press, to name a few. The posture many

unions have struck, featherbedding to protect their numbers, may ultimately doom them, at least in older industries. In addition, the unions' inability to organize in new economic sectors, especially in the United States, may well arise from workers' beliefs that union membership affords them little they cannot already get from management. Unions may soon be forced to adopt a more realistic, progressive attitude, trading off one locus of power, numbers, for another, greater participation. Meaningful participation would enhance the image of the union in the eyes of the workers. And because unions have resources—trained leaders, discipline, technical personnel, money—not available to unorganized groups of workers, a strong union presence can be crucial to the success of participation.

A political climate supporting worker participation is a prerequisite of its success. European experience suggests that government support may be necessary to get meaningful worker participation in light of the well-entrenched opposition of those who control the economic system. Laws requiring participation cannot substitute, however, for active employee support, as shown in France, where union and management opposition has nullified government initiatives.

Lack of start-up capital is often a stumbling block for worker participation in ownership. Governments must stand ready to lend workers' enterprises substantial sums of money, for these are public investments in job preservation and the revitalization of local economies. Experience proves that such investments are not the beginning of an endless infusion of government funds, merely forestalling the inevitable demise of a company. The size and the number of firms that could close as economic problems accelerate suggest that the government must get involved in worker participation because it is the only institution with the financial resources and the requisite broad social mandate.

The British Government has already stepped in, with mixed success, to help employees preserve their jobs through worker ownership. And in Ohio, workers and the community have received a pledge of a $100 million loan guarantee from the U.S. Government to help reopen the Campbell Works of Youngstown Steel, which employs

more than 4,000 people. This is just the first in what may become a flood of appeals to Washington for money to help workers and communities help themselves. In response, Congressman Peter Kostmayer has proposed a Voluntary Job Preservation and Community Stabilization Act to make available $100 million, or 1 percent of the amount spent on unemployment compensation, for loans to employees and communities. Internationally, the World Bank is now considering a major lending program to worker participation projects. The Inter-American Foundation, funded by the U.S. Government, has pioneered in loaning funds to Latin American worker-managed and -owned industries.[60]

Government assistance, however, could never be sufficient to meet the expected need. The economic, human, and institutional resources to make worker participation effective must come largely from employees themselves and from their immediate communities, as they have the most to lose if individual industries fail. In many cases, workers and communities should be partners in ownership to insure that workers do not take actions, through collective selfishness, that could harm the community. This is already happening in the state of New York in Jamestown, Saratoga Springs, and Herkimer, where the imminent closings of factories by their conglomerate owners have brought communities and workers together and saved businesses.[61] Government funds should be used to encourage a new service sector of accountants, industrial psychologists, and entrepreneurial managers who can provide worker-owned and -managed firms with ongoing technical assistance.

The rationale for worker participation derives from the humanistic assumption that people have the creative energy to change, to grow, and to achieve. If this human potential is to develop, it will require a new commitment on the part of individual workers willing to risk new forms of social and economic organization and to assume new responsibilities. It will be a demanding endeavor, but nevertheless a necessary one if the debilitating nature of much modern work is to be ameliorated and if the minds and hands of a large number of workers are to help tackle current economic problems. Yet advocates of reform should not forget that there are many workers who do not want

more responsibility and who feel secure in the routine of assembly line jobs. Any attempt to generalize about what employees want and how they will react risks creating unrealistic stereotypes. Worker participation efforts should be flexible enough to allow people not to participate in them.

Declining satisfaction with work life, slow productivity growth, and rising energy and natural resource costs could hardly come at a more difficult time. Issues of equity and income redistribution are in the forefront of political debates all over the world. The economically disenfranchised want their fair share. The global pie must continue to expand if economic betterment is to occur with as little social turmoil as possible. Society has the alchemist's task of trying to get greater production out of dwindling resources. Those who want more and those who are asked to produce more must cooperate if these problems are to be solved.

Yet worker participation will not be a panacea for economic problems. While participatory work settings are often labor-intensive, the problem of finding employment for the millions of new job seekers entering the labor markets daily in developing countries must be resolved by broader social and economic reform. Worker-management cooperation can help firms struggling against technological obsolescence, but it cannot resolve society's dilemma of how to assess the social and economic impact of technological innovation. Worker participation can help in the management of life on a finite planet, but it cannot increase the earth's resources.

The very size and nature of the industrial-consumer society will make it difficult to implement worker participation. The modern scale of production may make autonomous work groups and abolition of the assembly line impossible in many places. It is no coincidence that the most successful examples of fully integrated worker participation are in relatively small organizations where people can build trust in one another through daily contact. "Small is beautiful" may not only be an important concept in the design of technology; it may also be an organizational prerequisite if society is to have flexible, humane, and economically efficient institutions.

Yet despite these limitations, the higher productivity, cooperative labor-management relations, and better work life associated with worker participation argue strongly for new forms of management and ownership. The public seems aware of these advantages. Two out of three Americans in 1975 said they would prefer to work for an employee-owned and -controlled company if they were given the choice. Nearly one-third of those surveyed in a 1974 opinion poll in France said the single most important reform they wanted was industrial democracy.[62] While public opinion may shift with the economic currents, the participatory structures now being built into Western economies, and to some extent into those of other societies, should be around for a long time. The ways of work are changing and new opportunities are emerging to more fully develop human potential and to apply human capabilities to the challenging problems of the future.

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